

GOLOVKIN, Rostislav Vladimirovich; LUNIN, Igor' Vyacheslavovich;  
RYMOV, V.A., red.; OZERETSKAYA, A.L., red. izd-va; KARASEV,  
A.I., tekhn. red.

[Radiofrequency welding of straight-seam tubes] Radio-  
chastotnaia svarka priamoshovnykh trub. Moskva, Gos.  
nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metal-  
lurgii, 1961. 74 p. (MIRA 15:1)  
(Electric welding) (Tubes--Welding)

MATVEYEV, Yu.M., kand.tekhn.nauk; KRICHEVSKIY, Ye.M., inzh.; RYMOV, V.A.,  
inzh.

Speed conditions on continuous electric pipe welding machines.  
Stal' 22 no.2:148-152 F '62. (MIRA 15:2)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu  
metallurgicheskikh zavodov i Moskovskiy trubnyy zavod.  
(Electric welding--Equipment and supplies)  
(Pipe--Welding)

KIMURA, Y.A.; SHCHENKO, R.V.

... and calculations of the freezing of rivers and reservoirs.

... by OSI no.129:3-18 '65.

(MIRA 18:10)

RYMSHA, V. A.

166T37

USSR/Hydrology - Hydropower  
Ice

Mar/Apr 48

"Description of a Bathometer for Determining the  
Amount of Sludge Ice in a Water Sample," V. A.  
Rymsha

"Meteorol i Gidrol" No 2, pp 78-79

Bathometer is designed to determine amount of  
sludge ice in water sample by measuring amount  
of heat required to transform sludge ice into  
water. Equipped with heater winding and thermo-  
meters installed inside bathometer. Device car-  
ries Certificate of Authorship No 49487. Sub-  
mitted 10 Aug 47.

166T37

1. RYMSAN, V.A.

2. USSR (600)

Methods and Apparatus for Registering the Origination of Ice in Water and in Grounds, ---Transactions of the GGI, Issue 5 (59), Hydrometeorological Press, 1948 (3-41).

3. Meteorologiya i Gidrologiya, no.3, 1949. Report U-2551, 30 Oct 52

SOV/112-57-6-12035

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 6, p 44 (USSR)

AUTHOR: Rymsha, V. A.

TITLE: Methods for Calculating Frazil-Ice Discharge  
(Metodika rascheta stoka shugi)

PERIODICAL: Tr. Gos. gidrol. in-ta, 1956, Nr 55 (109), pp 70-93

ABSTRACT: Estimation and computation of frazil-ice discharge are developed for the case when frazil ice floats on the surface and moves in the form of surface accumulations (lumps, carpets, rings). Frazil-ice discharge means frazil-ice rate of flow over a definite period of time (full day, cold spell, season). Computation of the frazil-ice discharge includes calculation of the cooling of water masses down to 0°C along a specified river section and calculation of the intensity of frazil-ice formation and discharge. The thermal condition of the stream is determined by the heat stored in masses of water entering the river from a reservoir, lake, etc., and by the heat-exchange variation of this stored heat along the length of the river. The simplest method still adequately

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SOV/112-57-6-12035

Methods for Calculating Frazil-Ice Discharge

accurate for calculating stream cooling along its length is the heat-balance method. Formulae are given for determining the position of the zero isotherm along the stream after a specified period of time, and a nomogram is submitted for determining the water temperature in hydraulic profiles of individual sections and for determining the position of the zero-isotherm profile. Formulae, a curve and a nomogram are presented for determining the density of frazil-ice motion, the frazil-ice discharge per second, per day. The following cases are considered: (1) the length of the section forming frazil ice is equal to or less than the daily run of frazil ice; (2) the length of the section forming frazil ice is greater than the daily run of frazil ice; surface width and flow velocities are assumed to be constant at all design sections; (3) the basic characteristics entering the frazil-ice discharge calculations are different in various river sections and at various times; (4) frazil-ice formation is periodic, with a 1-day cycle that is due to prevalent formation of interstitial ice at the stream bottom; (5) the frazil-ice discharge consists of ice clusters,

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SOV/112-57-6-12035

**Methods for Calculating Frazil-Ice Discharge**

floating interstitial ice and subsurface ice at a certain depth. Formulae are presented for determining the thickness of a frozen layer of frazil ice and a relationship between the frozen and unfrozen frazil ices, these factors contributing corrections to the calculated daily amount of frazil-ice discharge. Formulae are also presented for determining the maximum frazil-ice discharge across a specified hydraulic profile and for determining the maximum one-hour frazil-ice discharge, which is important in evaluating conditions of its dumping through the frazil-ice spillway structures into the lower pool.

S.S.V.

Card 3/3

Author: Kuznetsov, V. A.

SOV/50-58-2-15/19

Title: Device for the Measuring of Low-flow Velocities of Water  
(Ustroystvo dlya izmereniya malikh skorostey tekuchey vody)

Publication: Meteorologiya i gidrologiya, 1958, No 3, pp. 34-38 (USSR)

Abstract: Very often, a need arises, in practical research work, for the measuring of low flow velocities ranging from 0 to 5 cm/sec. There are, however, no measuring devices of high sensitivity and small dimensions. The conventional devices are insufficient for the purpose indicated. The principle of heat, known in practice, which is based on the interdependence of the velocity of the flow surrounding a heated body and the intensity of the heat transfer by this element to the water, has facilitated the design of highly sensitive measuring devices of small dimensions. These devices include: King's thermometer, Sheleznyakov's katathermometer, Kirpichev's and Lygenson's heat-turbulimeters, and several others. The design proposed by the author constitutes an improved thermic speed indicator, which is free of many of the shortcomings encountered in the above-mentioned devices. Figure 1 a shows the principal pattern of this device. Given a temperature difference  $T_0 - T_1$

00V/50-50-3-15/19

Device for the Measuring of Low Flow Velocities of Water

and a time  $\tau = l$ , the heat consumption  $Q = I_0^2 \tau$ ,  $I_0$  being a value determined by the flow velocity  $W$ ,  $I_0 = f_0(W)$ . On the other hand, when the element (porcelain cylinder of 30 mm length, 6 mm diameter) is heated by an electric current induced in a coil, the interdependence between the heat consumption value  $Q$  and the value of the electric current  $I = f_1(I)$  and the flow velocity  $W$  can be plotted as  $Q = f_2(W)$ . The intensity of the current induced in the heating coil is controlled by a rheostat and checked by a milliammeter. The temperature gradient, registered by a thermoelement, is determined from galvanometer readings. The device was tested and varied; it showed maximum sensitivity with velocities of 0.0 and 0.1 m/second. The temperature gradient depends both on the flow velocity  $W$  and on the intensity of the electric current  $I$ . The results of varying are listed in Figure 1. A further improvement of the device is being considered. There are 3 figures and 1 reference which is in Soviet.

RYMSHA, V.A.; DONCHENKO, R.V.

Investigating heat losses from open water surfaces in winter.  
Trudy GGI no.65:54-83 '58. (MIRA 12:1)  
(Hydrometeorology)

Rymsha, U.A.

3(47) РИМША У.А. СЛЕДСТВИЯ

Ученый журнал гидрометеорологической науки, 1957, Москва, 1957.  
Труды 111. Следствия гидрометеорологических наблюдений за 1956 г. в  
Union Hydrological Commission. V. 11. Meteorological Observations,  
Leningrad, Gidrometeorizdat, 1959. 470 P. Errata slip included.  
2,000 copies printed.

Sponsoring agency: Otkrytoye upravleniye gidrometeorologicheskoy  
sluzhby pri Svyete Ministrov SSSR.

Resp. Ed.: V.A. Uryvayev; Ed.: V.S. Protodopov; Tech. Ed.: M.I.  
Braynina.

PURPOSE: This work is intended for meteorologists, hydrologists, and  
hydrophysicists, particularly those engaged in the study of snow  
and ice evaporation processes.

COVERAGE: This book contains papers on hydrophysics which were pre-  
sented and discussed at the Third All-Union Hydrological Conference  
in Leningrad, October 1957. The Conference published 10 volumes  
on various aspects of hydrology of which this is number 3. The  
editorial board in charge of the series include: V.A. Uryvayev  
(Chairman), O.A. Alskin, Ya.V. Bliynsk (deceased), O.M. Borauk,  
M.A. Velikanov, L.K. Davydov, A.F. Domaniatskiy, O.P. Kalinin, S.M.  
Kritsky, B.I. Rudalin, L.P. Mancis, M.P. Menkel, B.P. Orlov,  
I.V. Popov, A.K. Proskuryakov, D.L. Sokolovskiy, O.A. Spengler,  
A.P. Chebotarev, and S.K. Cherkavskiy. This volume is divided in-  
to 2 sections; the first contains reports from the subsection  
concerning the study of evaporation processes, and the second contains  
reports from the snow and ice subsection. References accompany  
each article.

Sokolnikov, N.M. (Engineer, Leningrad) Problems of the Ice and  
Thermal Regimen of Rivers and Reservoirs in Water Power Projects 348

Lylo, V.M. (Candidate of Geographical Sciences) Variations in  
the Glacial-Thermal Regimen of the Angara River During the Mel-  
ting of the Irkutsk Water Reservoir at a Time of Intensive Sludge  
Formation 353

Gottlib, Ya. L., Ye. Ye. Zaymin, and M.I. Smolin (Engineers)  
Studying the Winter Regimen of the Angara River While Planning  
Hydroelectric Power Stations 359

Aleksandrovskiy, Yu.V. (Docent, Candidate of Technical Sciences),  
and K.K. Krasimov (Engineer) Planning the Winter Level Regimes  
of the Tail-water of Hydroelectric Power Stations 369

Svetitskiy, V.P. (Engineer, SAODidap, Tashkent) Winter Regimen  
of the Hydroelectric Power Station of the Chirchik-Bozsuyskiy  
Cascade 377

Rymsha, U.A. (Candidate of Technical Sciences, OOI Leningrad)  
Study of the Conditions of Ice Development on Rivers Carrying  
Sludge Ice 382

Donchenko, B.K. (Candidate of Technical Sciences, OOI Leningrad)  
Experimental Studies of the Physical Properties of Sludge Ice 391

Berdnikov, V.P. (Candidate of Technical Sciences, OOI Leningrad)  
Methods for Studying the Formation of Sludge Jams 394

Kravchenko, M.A. (Engineer, DUMS Moldavia, Kishinev) Formation of  
Ice Blocking on the Dniester River and Methods of Studying them 401

Bazulov, A.A. (Director of the Observatory, DUMS Lithuanian SSR)  
Methods and Mechanics of Ice Blocking on the Neman River. Pre-  
vention and Control 406

Piotrovich, Y.Y. (Candidate of Technical Sciences, ZITP Moscow)  
Results of Studying the Melting Ice Cover on the Klyaz'minskoye  
Reservoir 414

ACCESSION NR: AT4004733

S/2922/63/007/000/0271/0277

AUTHOR: Ry\*msha, V. A.

TITLE: Investigation of the heat loss from an open water surface during the winter

SOURCE: Vses. nauchn. meteorologich. soveshch. Trudy\*, v. 7, Fizika prizemnogo sloya. Leningrad, 1963, 271-277

TOPIC TAGS: meteorology, water air heat transfer, winter heat loss, compensation calorimetric heat measurement, calorimeter, convection, evaporation, radiation balance, barometric balance, heat transfer, water temperature, water heat loss

ABSTRACT: Heat exchange between water and air at low temperatures has never been thoroughly investigated. This work explores the connection between convection ( $S_c$ ) and evaporation ( $S_e$ ) heat losses and the meteorological conditions. Experimental measurements were conducted using a special calorimeter by the Gosudarstvennyy gidrologicheskiy institut (State Hydrological Institute) in 1956 - 1958 at six locations on the Vuoksa, Chu, Irtysh, Yenisey and Angara rivers and the Zelenogorsk experiment station. The procedure was based on the compensational - calorimetric heat loss measurement method introduced by V. Ya. Al'tberg and V. V. Piotrovich (Trudy GGI, Vy\*P 11, 1941). The

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ACCESSION NR: AT4004733

calorimeter readings were corrected for large water surfaces by measuring the heat discharge differences between 2 points (3.5 km apart) on the Vuoksa river and the correction coefficient was found to be 0.8. From these measurements and from other similar data collected by other Soviet authors for higher temperature conditions, Ry'msha derived the universal empirical equation:

$$S_t + S_e = [(t_0 - t_2) + 1.63 (e_0 - e_2)] (K + 0.039W) \text{ cal/m}^2 \text{ day}$$

where: W = wind velocity in m/sec;  $t_0$  = water surface temperature in degrees C;  $t_2$  = temperature 2m above surface in degrees C;  $e_0$  = vapor pressure corresponding to  $t_0$ , m bars;  $e_2$  = humidity at 2m above surface, m bars; and where the variation of the coefficient K with  $\Delta t = t_0 - t_2$  is shown in Fig. 1 of the Enclosure. A more detailed analysis of the data showed that the convection and evaporation heat loss ratios depended upon the temperature difference  $\Delta t$ . It was concluded that substitution of proper values of K into the equation allowed calculation of convection and evaporation heat losses for a wide range of air and for large temperature differences between water and air. Orig. art. has: 2 figures, 5 tables and 10 formulas.

Card 2/4

ACCESSION NR: AT4004733

ASSOCIATION: Gosudarstvennyy gidrologicheskiy institut (State Hydrological Institute)

SUBMITTED: 00

DATE ACQ: 27Dec63

ENCL: 01

SUB CODE: AS

NO REF SOV: 004

OTHER: 001

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ACCESSION NR: AT4004733

ENCLOSURE: 01

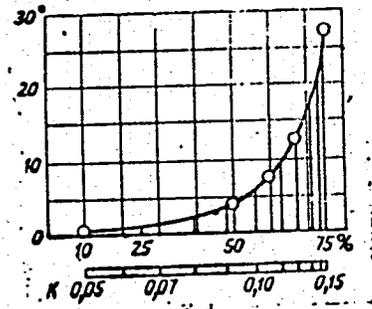


Fig. 1 - Relationship between the coefficient k and the temperature difference  $(t_0 - t_2)$

Card 4/4

RYPESHA, V.A.; DONCHENKO, R.V.

Characteristics of the conditions governing the formation and the  
development of ice on rapidly freezing rivers and reservoirs,  
Trudy GGI no.110:22-34 '64. (MIRA 17:7)

BENYAKOVSKIY, Mark Aleksandrovich; DENEZHNIKIN, Boris Sergeevich;  
CHUKHLOVA, Lyudmila Nikolayevna; BUTYLKINA, Larisa  
Il'inichna; RYMOV, V.A., red.

[Quality of sheet surfaces] Kachestvo poverkhnosti listov.  
Moskva, Izd-vo "Metallurgiya," 1964. 53 p. (MIRA 17:7)

RYMSHA, V.A.

Distribution of crystallization heat in the supercooled water  
mass in streams. Trudy GGI no.93:40-51 '62. (MIRA 16:3)  
(Ice on rivers, lakes, etc.)

RYMSHA, V.A.; DONCHENKO, R.V.

Method of calculating (forecasting) the conditions governing the  
formation of frazil ice. Trudy GGI no.93:52-63 '62. (MIRA 16:3)  
(Ice on rivers, lakes, etc.)

BRASLAVSKIY, A.P.; RYMSHA, V.A.

An absolute compensation pyrgeometer. Trudy GGI no.96:123-130  
'62. (MIRA 15:6)

(Pyrgeometer)

3.5800

S/169/62/000/003/023/090  
E202/E592

AUTHORS: Braslavskiy, A.P. and Rymsha, V.A.

TITLE: Absolute compensation pyrgeometer

PERIODICAL: Referativnyy Zhurnal, Geofizika, no. 8, 1962, 11,  
abstract 3B39. (Tr. Gos. gidrolog. in-ta, no. 96,  
1962, 123 - 130)

TEXT: An absolute pyrgeometer of new design is described. The principle of action of this instrument is based on compensation of heat, radiated from the black-surface transmitter, and very accurate measurement of current used for the compensation. The field work with the above instrument shows high stability of its readings which are completely unaffected by wind. This instrument was compared in experiments with pyrgeometers of A. Falkenberg and a thermoelectric balancometer and showed close values of the measured quantity, i.e. the reverse radiation. As a result of the additions to this new instrument it was found that they may be used as standard pyrgeometers during calibration of thermoelectrical balancometers. ✓B

Abstracter's note: Complete translation.

Card 1/1

RYMSHA, V.A.

Conditions influencing the crystallization of supercooled water  
according to laboratory data and in situ observations. Trudy GGI  
no.83:3-12 '60. (MIRA 14-1)

(Ice)

RYMSEA, Vladislav Aleksandrovich; PROSKURYAKOV, A.K., otv.red.;  
YASNOGORODSKAYA, M.M., red.; BRAYNINA, M.I., tekhn.red.

[Investigation of ice on rivers and reservoirs] Ledovye  
issledovaniia na rekakh i vodokhranilishchakh. Leningrad,  
Gidrometeor.izd-vo, 1959. 190 p. (MIRA 13:4)  
(Ice on rivers, lakes, etc.)

LIVSHITS, B.G.; RYMASHEVSKIY, G.A.

Variation in the Debye characteristic temperature (elastic) in  
the ordering of  $A_3B$  alloys. Ukr. fiz. zhur. 8 no.2:243-248 F '63.  
(MIRA 1683)

1. Institut stali i splavov, Moskva.  
(Nickel alloys—Thermal properties) (Nickel alloys—Electric properties)

RYMSZEWICZ, Stanislaw, mgr inz.

Standards of electric installations for ships. Bud okretowe  
Warszawa 9 no.11:411-412 N '64.

1. Standards Center of the Ministry of Navigation, Gdansk.

RYMSZEWICZ, Stanislaw, mgr inz.

Electrical engineering in the Polish shipbuilding industry.  
Bud okretowe Warszawa 9 no.4:123-125 '64.

1. Executive Board of the Shipbuilders' Section, Association  
of Polish Mechanical Engineers and Technicians, Gdansk.

RYMSZEWICZ, Stanislaw, mgr inz.

Standardization of magnetic ship compasses. Bud okretowe  
Warszawa 9 no.6:218 Je '64.

1. Standardization Centrum of the Ministry of Navigation,  
Gdansk.

RYMSZEWICZ, Stanislaw, mgr inż.

Standardization of ship magnetic compasses. Bud okretowa  
Warszawa 8 no.12:437-438 D'63.

1. Branzowy Centralny Ośrodek Normalizacyjny Ministerstwa  
Żeglugi, Gdansk.

RYMSZEWICZ, Stanislaw

Standardization of magnetic compasses for ships. Bud<sup>o</sup> okretowe Warszawa  
no.1:32-33 Ja '63.

1. Osrodek Normalizacyjny Nr 1 Ministerstwa Zeglugi, Gdansk.

RYMSZEWICZ, Stanislaw, mgr inz, (Gdansk)

Development of the supporting cooperating industries for the  
Polish shipbuilding industry during the period between the two  
World Wars. Buk okretowe Warszawa 8 no.2:42-45 F '63.

RYMSZEWICZ, Stanislaw, mgr.inz.

Standardization of electric equipment on ships. Bud okretowe  
Warszawa 7 no.8:276-277 Ag '62.

1. Osrodek Normalizacyjny Nr 1 Ministerstwa Zaglugi, Gdansk.

RYMSZEWICZ, Stanislaw, mgr inz.

Standardization of magnetic compasses for ships. Bud okretowe  
Warszawa 7 no.9:309 S '62.

1. Osrodek Normalizacyjny Nr 1 Ministerstwa Zeglugi, Gdansk.

RYMSZEWICZ, Stanislaw, mgr., inz.

Standardization of electric installations on ships at the Meeting of the technical Committee of the 18th International Electric Commission (IEC). Bud okretowe Warszawa 6 no.9:294-295 '61.

1. Osrodek Normalizacyjny Nr. 1 Ministerstwa Zeglugi, Gdansk.

(Electricity on ships)

L 41320-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(z)/  
EWP(b)/EWP(l)/EWA(s) PF-4 MJW/JD/HW/EM S/0129/65/000/001/0002/0007  
ACCESSION NR: AP5002937

38  
39  
B

AUTHOR: Kudryavtsev, I.V.; Rymynova, V.V.

TITLE: Influence of steel structure and cold working on its sensitivity to notching when subjected to cyclic loads.

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1966, 2-7, and top half of insert facing p. 24

TOPIC TAGS: steel notching, steel cold working, steel fatigue, steel structure, steel impact toughness/ steel 30KhGSA, steel 1Kh18N9T, steel 2Kh13

ABSTRACT: While it is generally accepted that the sensitivity of alloy steels to notching increases with steel strength, it is also known that cold hardening in the form of swaging by rollers, shot peening or stamping considerably decreases that sensitivity. Lack of detailed knowledge prompted that present study, for which steels 08, 20, 45, U8, 40Kh, 30KhGSA, 1Kh18N9T and 2Kh13 were used. Testing methods are described in detail. For fatigue tests the U-12 machine was used. Data on cyclic load strength are consolidated in a table. The following conclusions are the results of these tests: 1. The greatest sensitivity to notching under cyclic loads is shown by steels of medium strength (HRC 25-40). With increasing strength, the sensitivity to notching decreases. 2. The above

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I: 41320-65

ACCESSION NR: AP5002937

property is explained by the different hardenability of steels by a succession of cyclic loads. 3. In steels having a tendency to age as a result of cold working, sensitivity to notching abruptly declines. In steels of medium strength as well as in steels with an austenitic structure, cold working in depth increases sensitivity to notching. 4. These conclusions apply to tests using relatively small samples (diam. 14 mm) and to symmetric loading cycles. The application of the above conclusions to especially large pieces and to other (nonsymmetric) loading cycles requires additional experimentation. Orig. art. has: 4 figures, 2 formulas and 1 table.

ASSOCIATION: TsNIITMASH

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 001

Card 2/2 *ce*

KUDRYAVTSEV, I.V.; RYMYNOVA, V.V.

Effect of structure and work hardening on the notch sensitivity  
of steels during cyclic loading. Metalloved. i term.obr.met. no.1:  
2-7 Ja '65. (MIRA 18:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i  
mashinostroyeniya.

KUDYAVTSOV, I.V., doktor tekhn.nauk, prof.; REZNIKOV, Ye.V., inzh.

Increasing the hardness of steel by peening. Metalloved.  
i term. obr. met. no.10:29-33 O '61. (LINA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii  
mashinostroyeniya.

(Steel—Cold working)

(Shop peening)

KUDRYAVTSEV, I.V.; RYMINOVA, Ye.V.

Effect of work hardening on the fatigue resistance in 18KhNVA steel  
at high temperatures. Metalloved. i term. obr. met. no.9:33-37  
S '63. (MIRA 16:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i  
mashinostroyeniya.

PYNARZEWSKI, J.

Technical progress in water purification during the last 40 years. p. 206

GAZ, WODA I TECHNIKA SANITARNA (Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.  
Vol. 33, no. 5, May 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, September 1959  
Uncl.

RYMARZEWSKI, J.

TECHNOLOGY

PERIODICAL: GOSPODKA WODNA, 2 Vol. 18, no. 9 Sept. 1958.

RYMARZEWSKI, J. And others. Comparison of processes of removing iron and manganese from ground water originating in the natural and artificial infiltration of coastal areas using models of Filters; contact, AKCH, rapid, and dry filters. (To be contd.)

Monthly List of East European Accessions (EEAI) LC Vol. 8, no.4, April, 1959, Unclass.

RYNARZEWSKI, J.

"Removing iron and manganese from water on an experimental rapid filter in Poznan," p. 274.

"Problem of gasification of all solid fuels as seen at an international conference in Liege," p. 279.

Above from Gaz, Woda i Technika Sanitarna, Warszawa, Vol 28, No 9, Sept. 1954.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

Ryncarz, T.

3753

Litwiniŝzyn J., Mączyński J., Ryncarz T. An Electric Model of Mine Ventilation Network.

622.414:621.317.73

„Elektryczny analogon kopalnianych sieci wentylacyjnych”. Górnictwo. No. 1, Kraków, 1954, PWN, pp. 61—74, 9 figs, 1 tab.

By utilizing the mathematical analogy between a fixed air flow in the side lines of a ventilation network and the flow of the electric current through certain kinds of resistors it is possible to design model ventilation networks. This model makes it possible to replace elaborate calculations by simple measurements. An electric bulb may serve as a resistor with approximately analogical current and tension characteristics. The plan of the ventilation network may be the basis for designing the model. The possibility of designing such models as regards statistical studies, and the problem of choosing the correct units are also discussed.

GP  
GP  
(2)

RYNCARZ, T.

RYNCARZ, T. The scope of the application of trial pressure due to superimposed weight on soils. p. 534. Vol. 16, no. 12, Dec. 1956. GOSPODARKA WODNA. Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol 6, no. 4--April 1957

RYNGBAZ, Tadeusz, dr inż.; SKAWINSKI, R., mgr inż.

Electroosmotic flow of solutions in the soil as variable time phenomenon. Archiw hydrotech 11 no.1:87-112 '64.

1. Katedra Aerologii i Hydromechaniki Gorniczej, Akademia Gorniczo-Hutnicza, Krakow.

RYNCARZ, Tadeusz, dr inż.

Air head pressure losses in the air flow resulting from the  
motion of cages and skips in the shaft. Przegl gorn 20 no.6:  
286-295 Je '64

RYNCARZ, Tadeusz

Results of some model experiments on the influence of surface load on the form of a subsidence trough. Archiw gorn 8 no.2: 111-128 '63.

KEYTEL'GISSER, I.N., kand.tokhn.nauk; FIGOROV, G.S.; ZHURAVEL', V.A.;  
RYNDAK, S.A.; PROKUDENKO, N.G.

Improvement of the water-pulp handling operations in the coal  
preparation section of the Zaporozh'ye Coke and Coal Chemicals  
Plant. Koks i khim. no.2:13-15 '64. (MIRA 17:4)

1. Ukrainskiy proyektno-konstruktorskiy i nauchno-issledovatel'skiy  
institut po obogashcheniyu i briketirovaniyu ugley (for  
Keytel'gisser, Figorov, Zhuravel'). 2. Zaporozhskiy  
koksokhimiicheskiy zavod (for Prokudenko).

RYNDENKO, V.N., inzh.

(Unit for the oil treatment and priming of plywood. Der. prom.  
13 no.5:21-22 My '64. (MIRA 17:6)

1. Tyumenskiy zavod sel'skokhozyaystvennogo mashinostroyeniya.

RYNDENKOV, N.I.

Application of high-speed motion-picture photography for the  
investigation of the machining of the components of precision  
instruments. <sup>U</sup>sp.nauch.fot. 6:173 '59. (MIRA 13:6)  
(Motion pictures in industry)  
(Instrument manufacture)

RYNDENKO, V.N.

Machine for drying oil treatment and priming of veneer. Lakokras.  
mat. 1 ikh prim. no.5:68-69 '63. (MIRA 16:11)

*RYNDENKOY Yu A*

NEPOMNYASHCHIY, Kh.M.; RYNDEKOV, Yu.A.; SHNIKOV, V.G.; GOLODYACHIN, G.K.;  
OGURCHIKOV, L.G.

Stamping end profiles with one transition in two matrices; suggested  
by Kh.M. Nepomniashchii and others. Prom. energ. 12 no.12:18 D '57.  
(Sheet-metal work) (MIRA 10:12)

RYNDICH, A.; GOLOVINKIN, V.; KHABINSKIY, I.

Draft of a price list for shoe repairing remained a draft. Mest.prom. i  
khud.promys. 4 no.3:18-19 Mr '63. (MIRA 16:4)

1. Nauchno-issledovatel'skiy tekhnokhimicheskiy institut.  
(Boots and shoes--Repairing)

RYNDICH, A.A., kand. tekhn. nauk.

Fundamentals in the design of shoe lasts. Leg. prom. 18 no.1:35-37  
Ja '58. (MIRA 11:2)

(Shoe industry)

BUKANKOV, Ye.I., inzh.; MATVEYEV, B.D., kand.tekhn.nauk; RYNDICH, A.A.,  
kand.tekhn.nauk; KHOKHLOV, I.M.

Abrasion testing of spike heellifts for women's shoes. Kozh.-obuv.  
prom. 6 no.3:18-21 Mr '64. (MIRA 17:4)

LYUBICH, M.G., kand.tekhn.nauk; RYNDICH, A.A.

Studying women's shoe manufactures in the U.S.A.  
no.1:12-38 '62.

Trudy NITKHI  
(MIRA 17:4)

RYNDICH, A.A.

RYNDICH, A.A.: "The principles of designing shoe lasts and shoe uppers for mass production". Moscow, 1955. Min Higher Education USSR. Moscow Technological Inst of Light Industry imeni L.M. Kaganovich. (Dissertations for the Degree of Candidate of Technical Sciences).

SO: Knizhnaya letopis' No 45, 5 November 1955. Moscow.

ROSHCHINA, G.P.; RYEDICH, M.A.; SHIMANSKIY, Yu.I.

Conference on the liqued state of matter. Usp.fiz.nauk 58 no.4:  
749-756 Ap '56. (MLRA 9:8)  
(Kiev--Liquids--Congresses)

GOLIK, A.Z. [Holiyk, O.Z.]; RYNDICH, N.A. [Ryndych, N.A.]; KUCHINKA, M.Yu.  
[Kuchynka, M.Yu.]; GENINA, M.A. [Henina, H.O.]

Thermomechanical properties and double refraction of synthetic  
fibers. Ukr. fiz. zhur. 9 no.7:769-776 JI '64. (MIRA 17:10)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.

GOLIK, A.Z. [Golyk, O.Z.]; RYNDICH, N.A. [Ryndych, N.A.]; KUCHINKA, M.Yu.  
[Kuchynka, M.IU.]; SOKOLOVSKAYA, S.F. [Sokolovs'ka, S.F.]

Effect of thermal and thermomechanical treatment on the density of  
some synthetic polymers. Ukr. fiz. zhur. 9 no.7:783-791 J1 '64.

(MIRA 17:10)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.

*Ryndich, N.A.*

Category : USSR/Atomic and Molecular Physics .. Liquids D-8

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6405

Author : Golik, A.Z., Ryndich, N.A.

Inst : Kiev University

Title : Viscosity and Structure of Liquid Solutions of Zinc, Cadmium, Tin, Bismuth, and Lead in Mercury,

Orig Pub : Ukr. fiz. zh., 1956, 1, No 2, 170-182

Abstract : A study was made of the viscosity and density of an amalgam of Zn, Cd, Sn, Bi and Pb. Curves of the temperature dependence of the viscosity of solutions of zinc and cadmium lie between the curves in the components. The viscosity obeys an exponential law in the temperature range under investigation. The energy of activation of viscous flow is a linear function of the concentration. The density diminishes linearly with increasing temperature.

The temperature dependence of the viscosity of solutions of tin, bismuth and lead also obeys an exponential law. The isotherms of the viscosity of solutions of lead display a

Card : 1/2

GOLIK, A.Z. [Holyk, O.Z.]; RYNDICH, N.A. [Ryndych, N.A.]; BABENKO, S.A.

Viscosity of a Sn - Bi system [with summary in English]. Ukr.  
fiz. zhur. 3 no.3:365-369 My-Je '58. (MIRA 11:10)

1. Kiyevskiy gosudarstvennyy universitet.  
(Systems (Chemistry)) (Viscosity)

SOV/137-58-7-16107

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 310 (USSR)

AUTHORS: Likhoded, L.S., Ryndich, N.A.

TITLE: Quantitative Spectroscopic Analysis of Sands for Iron and Titanium  
(Kolichestvennyy spektral'nyy analiz peskov na zhelezo i titan)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1957, Vol 20, pp 186-193

ABSTRACT: The analysis is performed in an A-C arc. The upper electrode is a rod of electrolytic copper, 6 mm in diameter, the lower is a trough of the same kind of Cu into which powdered sand is poured in a ~2-mm layer. The gap between the upper electrode and the level of the sand is held at 1.5 mm. After 5-10 sec the arc is switched off and lit in a new place manually displacing the frame supporting the lower electrode. The exposure with a 3.5-4.5-amp current is 30 sec and with 1.5-2 amp it is 45 sec. In the latter case, to increase the conductivity of the sand 5% of powdered Cu is added, which is obtained electrolytically from refined  $\text{CuSO}_4$  (with 2.5-3 amp and 20-24 v). Determinable concentrations are: 0.07-0.72% Fe and 0.03-0.8% Ti. The error of the analysis is 4% for Ti & 11% for Fe.

M. N.

Card 1/1

1. Sand--Quantitative analysis
2. Iron--Determination
3. Titanium--Determination
4. Spectrum analyzers--Applications

*RyNDICH, N. A.*

USSR/Atomic and Molecular Physics - Liquids, D-8

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34465

Author: Roshchina, G. P., Ryndich, N. A., Shimanskiy, Yu. I.

Institution: None

Title: Conference on the Liquid State of Matter

Original Periodical: Usp. fiz. nauk, 1956, 58, No 4, 749-756

Abstract: The second conference on the liquid state of matter, held in Kiev from 30 May through 3 June 1955 under the auspices of the Kiev State University imeni T. G. Shevchenko.

*1 of 1*

- 1 -

RYNDICH, N.A.

Viscosity and structure of amalgams. Nauk povid. KDU no.1:45-46  
'56. (MIRA 11:4)

(Amalgams)

*Ryndich, N. A.*  
USSR Physical Chemistry, Solutions, Theory of Acids and Bases.

B-11

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22478.

Author : A. Z. Golik, N. A. Ryndich.

Inst : Not given

Title : Viscosity and structure of liquid solutions of Zinc, cadmium, tin, bismuth and lead in mercury.

Orig Pub : Ukr fiz. Zh 1956, I, No 2, 170-182 (ukr., reg. russ).

Abstract : Viscosity ( $\eta$ ) and density ( $d$ ) of binary liquid solutions of Zinc (I), Cadmium (II), Tin (III), Bismuth (IV) and Lead (V) in mercury (VI) are studied. Solutions I and II in VI, the components of which have a similar molecular structure belong to the number of molecular-mixing solutions. The curves of temperature dependence of  $\eta$  of the above mentioned solutions lie between curves of the components and grow higher with the increase in concentration of I or II, i.e. with the rise of the critical temperature of the solution. For series of solutions I and II in III, the curve of temperature dependence of  $\eta$  coincided with the whole studied temperature range. Solutions with identical  $d$  were also obtained. But  $\eta$  of these solutions is as different as is  $d$  in isoviscous solutions.

Card 1/2

-158-

USSR/Physical Chemistry, Solutions, Theory of Acids and Bases.

B-11

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22478.

Activations energy of a viscous stream ( $E_{\eta}$ ) is a linear concentration function. Other rules are observed in solutions of III, IV, V and VI, because their components possess different molecular structure. So for instance, a clear minimum is observed on isotherms  $\eta$  of solutions V in VI, which displaces toward the lesser concentration of V area, with the increase in temperature. The curve of concentration dependence in this case has a clear maximum. A connection between the molecular field structure is established with  $\eta$ , compressibility and substance critical parameters.

Card 2/2

-159-

*Ryndich, N.A.*  
LIKHODED, L.S., dots.; RYNDICH, N.A., assistant

Quantitative spectrum analysis of sand for iron and titanium. Izv.  
KPI 20:186-193 '57. (MIRA 11:3)  
(Sand) (Iron--Spectra) (Titanium--Spectra)

RYNDICH, N. A.

RYNDICH, N. A. - "Viscosity and Structure of Certain Liquid Amalgams." Min of Higher Education USSR, Kiev State U imeni T. G. Shevchenko, Kiev, 1955 (Dissertations For the Degree of Candidate of Physicomathematical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955

GOLIK, A.Z.; RYNDICH, N.A.; KUCHINKA, M.Yu.; ANDRIYENKO, S.S.

Thermomechanical properties of cord made from polycaprolactam.  
Khim.volok. no.2:23-25 '62. (MIRA 15:4)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.  
(Textile fibers, Synthetic) (Azepinone)

GOLIK, A.Z.; RYNDICH, N.A.; NUZHNYI, V.M.; GALAGAN, Yu.

Velocity of ultrasound and the compressibility of alcohol -  
acetone - water solutions. Ukr.khim.zhur. 28 no.4:506-510 '62.  
(MIRA 15:8)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.  
(Alcohols) (Acetone) (Ultrasonic waves--Speed)

RYNDICH, N. A.

USSR/Physics - Solid State Physics

Nov 53

"Conference on the Liquid State of Matter, Held 28-30 May 1953 at Kiev by the Academy of Sciences, Ukrainian SSR, and Kiev State University in T. G. Shevchenko," S. D. Ravikovich, G. F. Eoshchina and I. F. Skryshevskiy

Usp Fiz Nauk, Vol 51, No 3, pp 393-405

Summarize reports by the following: V. I. Danilov, on scattering of x-rays in liquids; A. F. Skryshevskiy, on x-ray study of solns of KOH, NaOH, LiOH, LiCl, and H<sub>2</sub>SO<sub>4</sub>; Ye. A. Foray-Koshits, on integral analysis of intensity curves; E. V. Deragin, Ye. G. Shvidkovskiy, C. Ya. Samoylov et al. on x-ray studies of liquid structure; A. Z. Golik, on characteristics of molecular structure of liquids; I. V. Radchenko, on modeling of liquids; F. K. Shestakovich, on new liquid models and influence of central and dipole forces on close ordering; A. Z. Golik and his associates S. D. Ravikovich, A. V. Orishchenko, V. F. Solomko, and N. A. Ryndich, on viscosity and density of matter in the liquid state; V. M. Chulanovskiy and D. S. Karenetskaya, on the influence of molecules' size and the intermolecular intensity on viscosity coeff; A. P. Frynza, on thermo-diffusion in binary systems; S. S. Urazovskiy, presence of grouping of identical atoms; A. R. Fegel', on relation between electrical properties and structure of liquids; M. F. Vuks, on light-dispersion method for studying liquids' structure.

GOLIK, A.Z.; RYNDICH, N.A.

Viscosity and structure of liquid solutions of zinc, cadmium, tin, bismuth and lead in mercury. Ukr. fiz. zhur. 1 no.2:170-182 Ap-Je '56. (MLRA 9:11)

1. Kiivs'kiy derzhavniy universitet imeni T.G. Shevchenka, kafedra molekulyarnoi fiziki. (Amalgams)

VASYUN'KOV, A., polkovnik; RYNDIN, A., podpolkovnik

Antiaircraft battery in an airborne landing. Voen. vest. 43  
no.10:89-91 0 '63. (MIRA 16:12)

RYNDIN, A.

Geographical work in the Moscow Planetarium. Geog.v shkole  
no.2:69-70 Mr-Ap '54. (MLRA 7:2)  
(Geography) (Moscow--Planetaria) (Planetaria--Moscow)

RYNDIN, A.

RYNDIN, A.....Turisticheskie peshekhodnye marshruty po Moskovskoi Oblasti dlia  
molodezhi. (Moskva), Moskovskii rabochii, 1946. 50 p. DLC: DK511.M6R9

SO: LC, Soviet Geography, Part II, 1951/Unclassified

RYNDIN, A.A. (Moskva); GORSHUNIN, V.G. (Moskva)

Geography teacher's work in a pioneer camp. Geog.v shkole 24 no.3:  
54-57 My-Je '61. (MIRA 14:5)

(Moscow Province--Pioneers (Communist Youth))

(Moscow Province--Physical geography--Study and teaching)

BIBIK, A.Ye.; DOMETTI, A.A.; ZIMINA, A.M.; LAKTIONOVA, P.I.; MAKSIMOV,  
M.A.; MOROSHKINA, O.I.; MYASISHCHEVA, B.I.; ERDELI, V.G.;  
NECHAYEVA, Yu.A.; PADEZHNOV, A.I.; PREOBRAZHENSKIY, A.I.;  
RAUSH, V.A.; RYNDIN, A.A.; SAUSHKIN, Yu.G.; SMIRNOVA, N.P.;  
STROYEV, K.F.; TOPORKOV, I.D.; FREYKIN, Z.G.

Fedor Pavlovich Kalinin; obituary. Geog. v shkole 26 no.2:85  
Mr-Ap '63. (MIRA 16:4)

(Kalinin, Fedor Pavlovich, 1899-1962)

DOMETTI, A.A.; ZIMINA, A.M.; KALININ, F.P.; LAKTIONOVA, P.I.; MOROSHKINA, O.I.;  
MYASISHCHEVA, Ye.I.; NECHAYEVA, Yu.A.; PREOBRAZHENSKIY, A.I.; RUSH,  
V.A.; RYNDIN, A.A.; SAUCHKIN, Yu.G.; STROYEV, K.F.; TEREKHOV, P.G.  
[deceased]; FREYKIN, Z.G.; SHESTAROV, V.N.

Nikolai Nikolaevich Baranskii's 80th birthday. Geog. v shkole 24  
no.4:7-8 J1-Ag '61. (MIRA 14:8)  
(Baranskii, Nikolai Nikolaevich, 1881)

GOROSHCHENKO, V.P.; RYNDIN, A.A.

Establishing continuity between the primary and the fifth grades  
in the study of geography. Geog. v shkole 24 no.4:66-70 J1-Ag '61.  
(MIRA 14:8)

(Geography--Study and teaching)

RYNDIN, A.A.

KUZ'MIN, V.N.; KURPAN, I.F.; RYNDIN, A.A.

All-Union expedition of pioneers and schoolchildren in commemoration  
of the 40th anniversary of the Great October Socialist Revolution.  
Geog. v shkole 20 no.3:1-6 My-Je '57. (MIRA 10:6)  
(School excursions)

REVAZASHVILI, B.I.; RYNDIN, A.N.; BEREZIN, Yu.L.

Testing a sound-ranging regulator for the automatic control of  
mill charging at the Tekeli ore dressing plant. TSvet.met. 35  
no.12:8-12 D '62. (MIRA 16:2)  
(Tekeli--Crushing machinery). (Automatic control)

RYNDIN, B. K.

Vspomagatel'nye tabitsy dlia nachisleniia zarabotnoi platy rabochim lesozagotovitel'nykh i splavnykh predpriatii Ministerstva lesnoi promyshlennosti SSSR (Auxiliary tables for computing wages of workers in lumbering and rafting enterprises of the U. S. S. R. Ministry of the Lumber Industry). Gosstatizdat, 1952. 160 p.

SO: Monthly List of Russian Accessions. Vol. 6 No. 7 October 1953

RYNDIN, E.A.

Some data on the relationship of volcanic activity to change  
of magnetic field. Biul. vulk. sta. no.38:39-40 '64.

(MIRA 18:3)

RYNDIN, E.A.; CHIRKOV, A.M.; SHTEYNBERG, G.S.

Magnetic survey of the Avacha Volcano. Biul. vulk. sta.  
no.38:33-38 '64. (MIRA 18:3)

SHTEYNBERG, G.S.; RYNDIN, E.A.; CHIRKOV, A.M.

Study of the geomagnetic field on the Avacha volcano. Geomag. i  
aer. 4 no.5:972-974 S-O '64. (MIRA 17:11)

1. Institut vulkanologii Sibirskogo otdeleniya AN SSSR.

NEKHAMKIN, N.O., kand. tekhn. nauk; RYNDIN, N.I., kand. tekhn. nauk;  
KHRABROV, S.I., inzh.

Studying the joining of particle board by metallic fastening  
and tenons. Der. prom. 13 no.9:16 S '64.

(MIRA 17:11)

RYNDIN, H.I., inzh.

Joints of prestressed precast reinforced concrete elements.

Sbor. LIIZHT no.158:62-76 '58.

(MIRA 11:6)

(Prestressed concrete construction)

ARSKIY, G.M., kand.tekhn.nauk; RYNDIN, N.I., kand.tekhn.nauk

Effect of oil saturation of concrete on the bearing capacity of  
reinforced concrete elements. Prom.stroi. no.10:44-46 '62.

(MIRA 15:12)

(Precast concrete--Testing)

ARSKIY, G.M., kand.tekhn.nauk; RYNDIN, N.I., kand.tekhn.nauk

Effect of the greasing of reinforced concrete elements on the  
bond between concrete and reinforcement. Prom.stroi. 41 no.3:  
39-40 Mr '64. (MIRA 17:3)

AVIROM, L.S., kand. tekhn. nauk; PITLYUK, D.A., kand. tekhn.nauk;  
RYNDIN, N.I., kand. tekhn.nauk; GNEDOVSKIY, V.I., prof., zasl.  
deyatel' nauki i tekhniki RSFSR, retsenzent; PREYS, P.V., prof.,  
nauchnyy red.; GRIGOR'YEVA, I.B., red. izd-va; PUL'KINA, Ye.A.,  
tekhn. red.

[Joints for elements of large-panel and large-block buildings]  
Styki elementov krupnpanel'nykh i kurpnoblochnykh zdanii. Le-  
ningrad, Gosstroizdat, 1962. 215 p. (MIRA 15:7)  
(Building--Details)

RYNDIN, M.I., Cand Tech Sci -- (diss) "Seams of stressed and unstressed elements of prefabricated reinforced concrete building <sup>travellers</sup> shells." Len, 1958, 19 pp (Min of Railways USSR. Len Order of Lenin Inst of Engineers of Railroad Transport in Academician V.M. Obratsov) 100 copies (KL, 27-8, 112)

RYNDIN, N.I.

Mechanization of plastering work at the Stalin Metallurgical Construction Trust. Biul.stroi.tekh. 10 no.11:12 Je '53. (MLRA 6:8)

1. Trest Stalinmetallurgstroy. (Plastering)

RYNDIN, N.V.

First results of work in Crimean citrus culture. Biul. Glav. bot. sada  
no.20:124-125 '55. (MIRA 8:9)

1. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova.  
(Crimea--Citrus fruits)

RYNDIN, N.V.

KOVERGA, A.S., kandidat biologicheskikh nauk; RYNDIN, N.V., kandidat sel'skokho-  
zyaystvennykh nauk.

Work results of the Nikita State Botanical Garden. Agrobiologiya no.1:  
112-118 Ja-F '57. (MIRA 10:4)

1. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova,  
Yalta.

(Yalta--Botanical gardens)

Ryndin, R.M.

USSR/ Nuclear physics

Card 1/1 Pub. 22 - 18/46

Authors ; Ryndin, R. and Smorodinskiy, Ya.

Title ; Similar transformations of nonpolarized particles

Periodical ; Dok. AN SSSR 103/1, 69-71, Jul 1, 1955

Abstract ; Studying the dispersion of nonpolarized particles with nucleons, the author determined the amplitude of the dispersion up to the precision of the sign before the operator  $\rightarrow \int n$ , i.e., he reached the same precision in the determination of the amplitude or the cross-section of a dispersion, as Minami did in his determination of the  $\pi$ -meson dispersion by nucleons (polarized). Both the author and Minami proved the invariance of the amplitude of dispersion. In the above mentioned operator  $n$ , the  $n$  is a single vector normal to the plane of dispersion  $n = \frac{K \times K_0}{|K \times K_0|}$ . Two USA references (1950 and 1954).

Institution : The Acad. of Sc., USSR, Institute of Nuclear Problems

Presented by: Academician L. D. Lindau, March 24, 1955

MININ, R.M., and SMORODINSKIY, Y.A.

Minami ambiguity and nucleon-nucleon scattering (II/58)

CERN-Symposium on High Energy Accelerators and Pion  
Physics.

Geneva, 11-23 June 56

In. Branch #5

RYNDIN, R. M., Cand Phys-Math Sci -- (diss) "On the Full Set  
of Experiments Concerning Elastic Dispersion of Nucleons by  
Nucleons." [Mos], 1957. 8 pp ~~29xxxx~~ <sup>Joint</sup> (United Inst of Nuclear  
Res, Laboratory of Theoretical Physics), 100 copies. Biblio-  
graphy at ~~the~~ end of ~~the~~ text (11 titles). (KL, 47-57, 85)

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RYNDIN, R.M., SMORODINSKIY, Ya. A.

"Minami Ambiguity and Nucleon-Nucleon Scattering," paper presented at  
CERN Symposium, 1956, appearing in Nuclear Instruments, No. 1, pp. 21-30,  
1957

8208

✓ CONSTRUCTION OF THE SCATTERING MATRIX OF A  
TWO-NUCLEON SYSTEM. L. Fuzikov (USSR Academy of  
Sciences, Moscow) and R. Ryndin and J. Smorodinsky

(Joint Inst. of Nuclear Research): Nuclear Phys. 3, 438-46  
(1957) May.

*The  
Sci*

The problem of the number of experiments which are necessary for the determination of the elements of the elastic scattering matrix is discussed. It is shown that in virtue of the unitarity condition the required number of experiments equals the number of complex functions entering the scattering matrix. In the case of nucleon-nucleon scattering the elastic scattering matrix can be determined on basis of 5 experiments: measurement of the cross section, polarization, normal component of the polarization correlation tensor and the normal components of the triple scattering tensor (for both particles). It is shown that experiments with rotation of polarization by the external magnetic field are not necessary for phase-shift analysis.

(auth)

*MAK*